

Serial No.: 10/625,002

PD020069

Listing and Amendments to the Claims

Please **amend** claims 1, 3-9 and 11 as indicated. Please **cancel** claims 2 and 10.

1. (Currently Amended) Method for detecting a wobble signal, ~~characterized in that it comprises~~ comprising the steps of:

comparing an input signal (IS) comprising the wobble signal (WS) with a reference signal (RS), the reference signal (RS) corresponding in phase and frequency to the desired wobble signal; and

outputting an output signal (OS) indicating the amplitude and the phase of the wobble signal,

wherein the comparing step comprises the steps of:

generating a sum signal (S1) and a difference signal (S2) of the input signal (IS) and the reference signal (RS); and

comparing the amplitudes of the sum signal (S1) and the difference signal (S2) to obtain the relative phase between the wobble signal (WS) and the reference signal (RS).

2. (Cancelled)

3. (Currently Amended) Method according to claim 2 ~~1~~, ~~characterized in that~~ wherein the comparing step further comprises the step of further processing said sum signal (S1) and said difference signal (S2).

4. (Currently Amended) Method according to claim 3, ~~characterized in that~~ wherein the further processing comprises one of absolute value calculation and phase sensitive rectification.

Serial No.: 10/625,002

PD020069

5. (Currently Amended) Method according to claim 3, ~~characterized in that~~ wherein the comparing step further comprises the step of generating a further difference signal (DS) of said processed sum signal (S1) and said processed difference signal (S2).
6. (Currently Amended) Method according to claim 3, ~~characterized in that~~ wherein the comparing step further comprises the step of integrating said further processed sum signal (A1) and said further processed difference signal (A2) over a wobble period.
7. (Currently Amended) Method according to claim 5, ~~characterized in that~~ wherein the comparing step further comprises the step of integrating said further difference signal (DS) over a wobble period.
8. (Currently Amended) Method according to claim 1, ~~further comprising the step of calculating~~ wherein the reference signal (RS) is calculated.
9. (Currently Amended) Method according to claim 1, ~~further comprising the step of storing~~ wherein the reference signal (RS) is stored in a table.
10. (Cancelled)
11. (Currently Amended) Apparatus for reading from and/or writing to recording media, ~~characterized in that~~ it comprises means for performing a method according to any of claims ~~4-10~~ 1 and 3-9.